

Patent claims

1. A cage (1) for tapered ball bearings (9) having ball pockets (3) which are adjacent to one another on the circumferential side about a rotational axis (2) of the cage (1), the cage (1) having the following features:

- the ball pockets (3) are delimited on the circumferential side by webs (4),
- the cage (1) has retaining lugs (10) which are resilient in a sprung manner for axially securing the cage (1) in an annular groove (13) of an inner ring (11), each of the retaining lugs (10) protruding from one of the side walls (5),
- circumferential flanks (14) on the retaining lugs (5) extend in an inclined manner with respect to one another.

2. The cage as claimed in claim 1, in which the flanks (14) which face one another on the circumferential side are inclined with respect to an imaginary plane (15) which emanates from the rotational axis and is aligned with the rotational axis (2).

3. The cage as claimed in claim 1, in which the flanks (14) are flat surfaces which face the circumferential gap (16), the surfaces being inclined at an angle of 30° with respect to an imaginary plane (15) which emanates from the rotational axis (2) and is aligned with the rotational axis (2).

4. The cage as claimed in claim 1, 2 or 3, in which the circumferential spacing between flanks (14), which face one another at a circumferential gap (16), of mutually adjacent retaining lugs (10) increases in the direction of the rotational axis (2).

5. The cage as claimed in claim 1, in which the ball pockets (3) are delimited in at least one axial direction of the cage (1) in each case by a side wall (5) having an approximately uniform wall thickness.

6. The cage as claimed in claim 5, in which the side walls (5) are arched, starting from the webs (4), at least in the axial direction and gaps (6) are therefore formed between the side walls (5) which protrude beyond the web (4) and are adjacent on the circumferential side.

7. The cage as claimed in claim 6, in which the retaining lugs (10) protrude in the axial direction at most to the extent that the side walls (5) protrude at most in the axial direction starting from the web (4).

8. The cage as claimed in claim 6, having grooves (18), the wall thickness of the side walls (5) being reduced by in each case one of the grooves (18) and each of the grooves (18) being delimited in the direction of the rotational axis (2) by one of the retaining lugs (10) and, on the side of the ball pockets (3), by one of the side walls (5).

9. The cage as claimed in claim 8, in which the groove (18), as viewed in a longitudinal section along the rotational axis (2) of the cage (1), is described by a radius.

10. The cage as claimed in claim 6, having ribs (7) in the circumferential direction between two side walls (5), each of the ribs (7) emanating in the axial direction from

in each case one of the webs (4) and connecting in each case two of the side walls (5) to one another on the circumferential side.

11. The cage as claimed in claim 10, in which each of the grooves (18) is delimited radially to the outside proportionately by one of the side walls (5) and by two of the ribs (7) which are separated from one another in the circumferential direction by means of one of the side walls (5).

12. The cage as claimed in claim 10, in which the grooves (18) are delimited partially in pairs, radially to the outside, jointly by at least one of the ribs (7).

13. The cage as claimed in claim 10, in which each of the circumferential gaps (16) is delimited partially radially to the outside by one of the webs (4) and by one of the ribs (7).

14. The cage as claimed in claim 1, having a side rim which runs on the circumferential side, the side rim (17) delimiting the ball pockets (3) in the opposite direction to the axial direction.

15. The cage as claimed in claim 14, in which the smallest radial spacing of the side rim (17) from the rotational axis (2) of the cage (1) is greater than the greatest radial spacing of the side walls (5) from the rotational axis (2).